

<110> Hansen, J. Norman

<120> Construction of a Strain of Bacillus subtilis 168 that Displays the Sublancin Lantibiotic on the Surface of the Cell

<130> 108172-00057

<150> 60/215,449

<151> 2000-06-29

<160> 3

<170> PatentIn version 3.1

<210> 1

<211> 2517

<212> DNA

<213> Artificial Sequence

<220>

<223> The EcoRI-HindIII insert of the pLPVc integrative plasmid.

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<210> 2

<211> 300

<212> DNA

<213> Artificial Sequence

<220>

<223> The sequence of sunA-PG20-SL gene and corresponding peptide sequence.

<220>

<221> CDS

<222> (1)..(300)

<223>

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aaa ggt agt gga tta gga aaa gct cag tgt gct gcg ttg tgg cta caa 96

Lys Gly Ser Gly Leu Gly Lys Ala Gln Cys Ala Ala Leu Trp Leu Gln

20 25 30

tgt gct agt ggc ggt aca att ggt tgt ggt ggc ggc gcc gtt gct tgt 144

Cys Ala Ser Gly Gly Thr Ile Gly Cys Gly Gly Gly Ala Val Ala Cys

35 40 45

caa aac tat cgt caa ttc tgt aga ggt ggt ggt ggg gga ggc ggg gga 192

Gln Asn Tyr Arg Gln Phe Cys Arg Gly Gly Gly Gly Gly Gly Gly Gly

50 55 60

ggg ggt ggt ggt gga gga ggt ggt ggt ggt ggt atg tca aag ttc 240

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Met Ser Lys Phe

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<212> PRT

<213> Artificial Sequence

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<223> The peptide sequence of sunA-PG20-SL.

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Cys Ala Ser Gly Gly Thr Ile Gly Cys Gly Gly Gly Ala Val Ala Cys

35 40 45

Gln Asn Tyr Arg Gln Phe Cys Arg Gly Gly Gly Gly Gly Gly Gly Gly

50 55 60

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Met Ser Lys Phe

65 70 75 80

95

100

Parameter	Control		100 mg/kg		200 mg/kg		400 mg/kg		800 mg/kg	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Body weight (g)	210.0	10.0	210.0	10.0	210.0	10.0	210.0	10.0	210.0	10.0
Food intake (g)	10.0	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0	2.0
Water intake (ml)	5.0	1.0	5.0	1.0	5.0	1.0	5.0	1.0	5.0	1.0
Urine volume (ml)	1.0	0.2	1.0	0.2	1.0	0.2	1.0	0.2	1.0	0.2
Urine pH	7.0	0.5	7.0	0.5	7.0	0.5	7.0	0.5	7.0	0.5
Urine creatinine (mg/dl)	0.5	0.1	0.5	0.1	0.5	0.1	0.5	0.1	0.5	0.1
Urine protein (mg/dl)	0.1	0.05	0.1	0.05	0.1	0.05	0.1	0.05	0.1	0.05
Urine glucose (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine ketone (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine bilirubin (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine urobilinogen (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine hemoglobin (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine nitrite (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine leukocytes (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine erythrocytes (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine casts (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine crystals (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine mucus (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine bacteria (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine fungi (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine parasites (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine pH	7.0	0.5	7.0	0.5	7.0	0.5	7.0	0.5	7.0	0.5
Urine creatinine (mg/dl)	0.5	0.1	0.5	0.1	0.5	0.1	0.5	0.1	0.5	0.1
Urine protein (mg/dl)	0.1	0.05	0.1	0.05	0.1	0.05	0.1	0.05	0.1	0.05
Urine glucose (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine ketone (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine bilirubin (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine urobilinogen (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine hemoglobin (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine nitrite (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine leukocytes (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine erythrocytes (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine casts (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine crystals (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine mucus (mg/dl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urine bacteria (mg/dl)	0.0	0.0								